

(FOC) with a nearly 50% work share, including the FOC ground control segment and providing the payloads for the first 22 FOC satellites through its subsidiary SSTL, and has been selected by ESA in 2018 as the prime contractor to develop EGNOS V3, the next generation of the European Satellite Based Augmentation System (SBAS) planned to provide the aviation community with advanced Safety of Life services and new services to Maritime and Land users.

**Spacecraft Equipment.** Airbus Defence and Space offers an extensive portfolio of embedded subsystems and equipment for all types of space applications: telecommunications, Earth observation, navigation, scientific and space exploration missions, manned spaceflight and launchers.

**French deterrence systems.** ArianeGroup as prime contractor holds the contracts with the French State for the submarine-launched deterrence system family.

## Connected Intelligence

**Intelligence** is a designer and supplier of C4I systems (Command, Control, Communications, Computers and Intelligence), which provides information systems and solutions to armed forces worldwide to support land, air and sea operations, assuring information superiority and supporting decision making at all levels of the command chain. Competitors in this area largely come from European or American based defence companies.

With the very-high-resolution twin satellites Pleiades 1A and 1B, SPOT 6 and SPOT 7, Airbus Defence and Space's optical satellite constellation offers customers a high level of detail across wide areas, a highly reactive image programming service and unique surveillance and monitoring capabilities. Airbus Defence and Space is currently producing four Pléiades Neo, Airbus' new very high resolution satellites. They will join the already large Airbus constellation of optical and radar satellites and will offer enhanced performances and the highest reactivity in the market thanks to direct access to the data relay communication system, known as SpaceDataHighway.

TerraSAR-X, a radar-based Earth observation satellite that provides high-quality topographic information, enabled Airbus Defence and Space to significantly expand its capabilities by proposing new kinds of images based on radar.

**Secure Communications** provides armed forces and governments with secure satellite communications. For example in the UK, Airbus Defence and Space delivers in the frame of the "Skynet 5 programme" tailored end-to-end in-theatre and back-to-base communication solutions for voice, data and video services, ranging from a single voice channel to a complete turnkey system incorporating terminals and network management. This contract, pursuant to which Airbus Defence and Space owns and operates the UK military satellite communication infrastructure, allows the UK MoD to place orders and to pay for services as required.

**CyberSecurity** provides companies, critical national infrastructures and government and defence organisations with reliable, high-performance products and services to detect, analyze and respond to increasingly sophisticated cyber attacks. The market growth is driven by an exponential increase in cyber-attacks, the increased use of connected assets and global digital transformation. Customers are governments and private companies with a high grade security requirement.

**Security Solutions** answers manifold operational needs in security and critical infrastructure protection by providing adaptable solutions and services needed to achieve everyday missions

**Secure Land Communications** includes infrastructures, devices, applications and services based on Tetra, Tetrapol and Broadband technologies.

## Unmanned Aerial Systems

In the field of UAS, Airbus Defence and Space is active at both product and service level. Airbus Defence and Space is the leading UAS service provider for the German air forces meeting their MALE Intelligence, Surveillance and Reconnaissance needs in the operational theatre. These interim solutions, based on non-proprietary MALE systems, will be replaced by a new generation European MALE Remotely Piloted Aircraft System (RPAS) where Airbus Defence and Space is working with its European partners. Airbus Defence and Space also provides mini-UAS to the French armed forces and selected export customers and the KZO (*Kleinflugzeug für Zielortung*) UAS to the German armed forces. It is developing the solar-powered Zephyr for both military and civil applications such as relay stations for internet provision to remote or sparsely populated regions.

## Production

Airbus Defence and Space is headquartered in the Munich region. The main engineering and production facilities of the Division are located in France (Paris region and southwest France), Germany (Bavaria, Baden-Württemberg and Bremen), Spain (Madrid region and Andalusia) and the UK (southern England and Wales). In addition, Airbus Defence and Space operates a global network of engineering centres and offices in more than 80 countries.

## MBDA

The Company's missile business, in addition to the ArianeGroup joint venture, derives from its 37.5% stake in MBDA (a joint venture between the Company, BAE Systems and Leonardo). MBDA offers missile systems capabilities that cover the whole range of solutions for air dominance, ground-based air defence, maritime superiority and battlefield engagement. Beyond its role in European markets, MBDA has an established presence in export markets like Asia, the Gulf region and Latin America.

The broad product portfolio covers all five principal missile system categories: air-to-air, air-to-surface, surface-to-air, anti-ship and surface-to-surface. MBDA's product range also includes a portfolio of airborne countermeasures such as missile warning and decoy systems, airborne combat training and counter-improvised explosive devices (IED) and counter-mine solutions. The most significant programmes currently under development are the next generation of the successful MICA (*Missile d'interception, de combat et d'autodéfense*) air-to-air missile called MICA NG, the network enabled precision surface attack SPEAR missile and the "Common Anti-Air Modular Missile Extended Range (CMM-ER)", which is an anti-air missile family with land and naval launched applications, the Anglo-French joint initiative for a "Future Cruise / Anti-Ship Weapon (FC/ASW)" aiming to replace prior generation cruise-